

# CONSTRUCTION PLANS FOR ELKHORN CREEK FISH BARRIER WOLF CREEK, MONTANA

PREPARED FOR:



PPL CORPORATION

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CONSTRUCTION**

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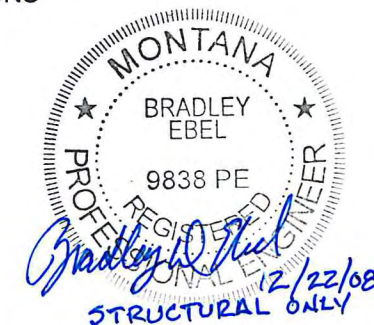
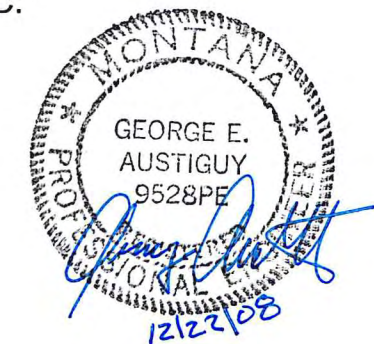
ENVIRONMENTAL MANAGEMENT CONSULTANTS CORPORATION

IN CONJUNCTION WITH

BRIDGER ENGINEERS, INC.

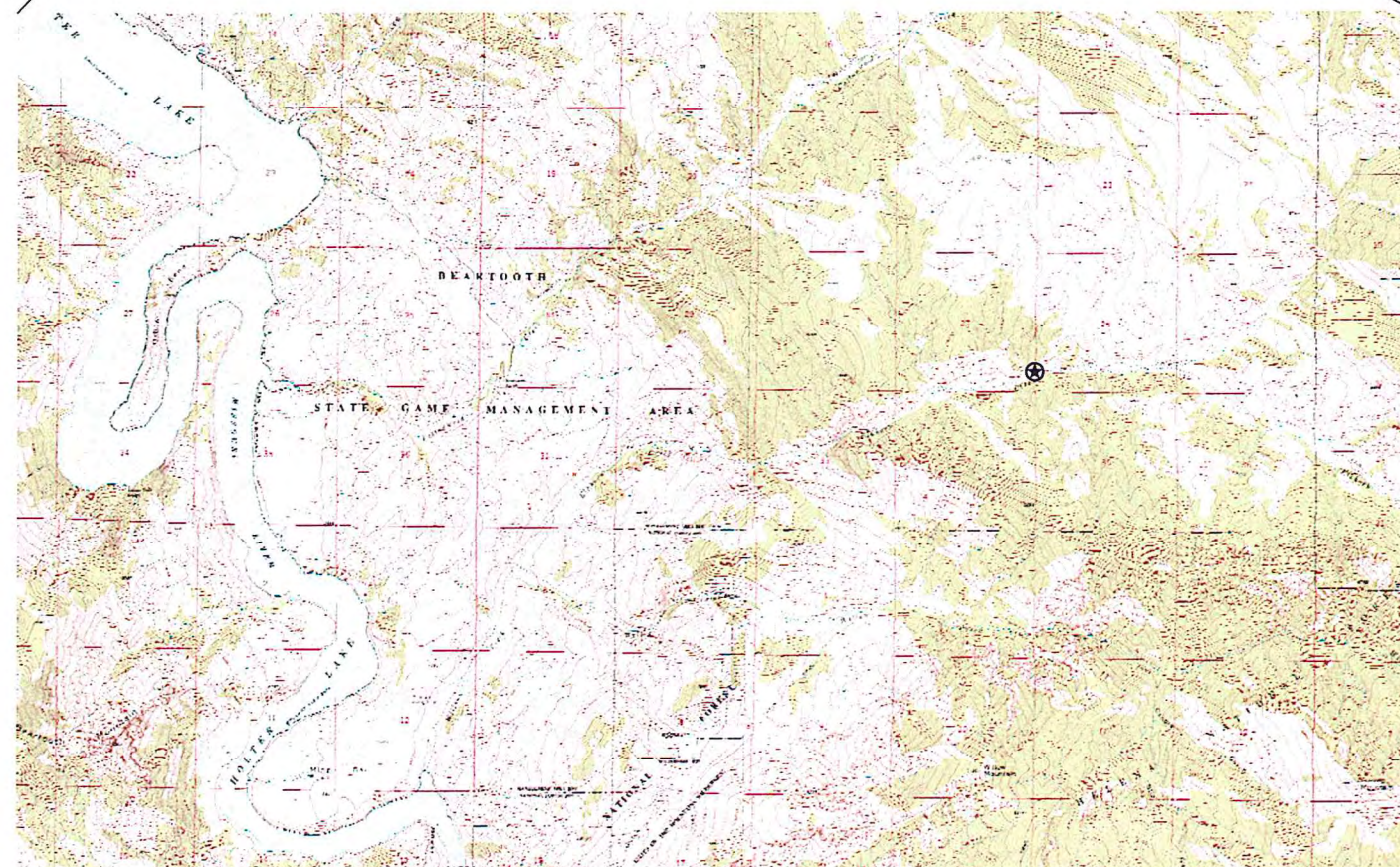
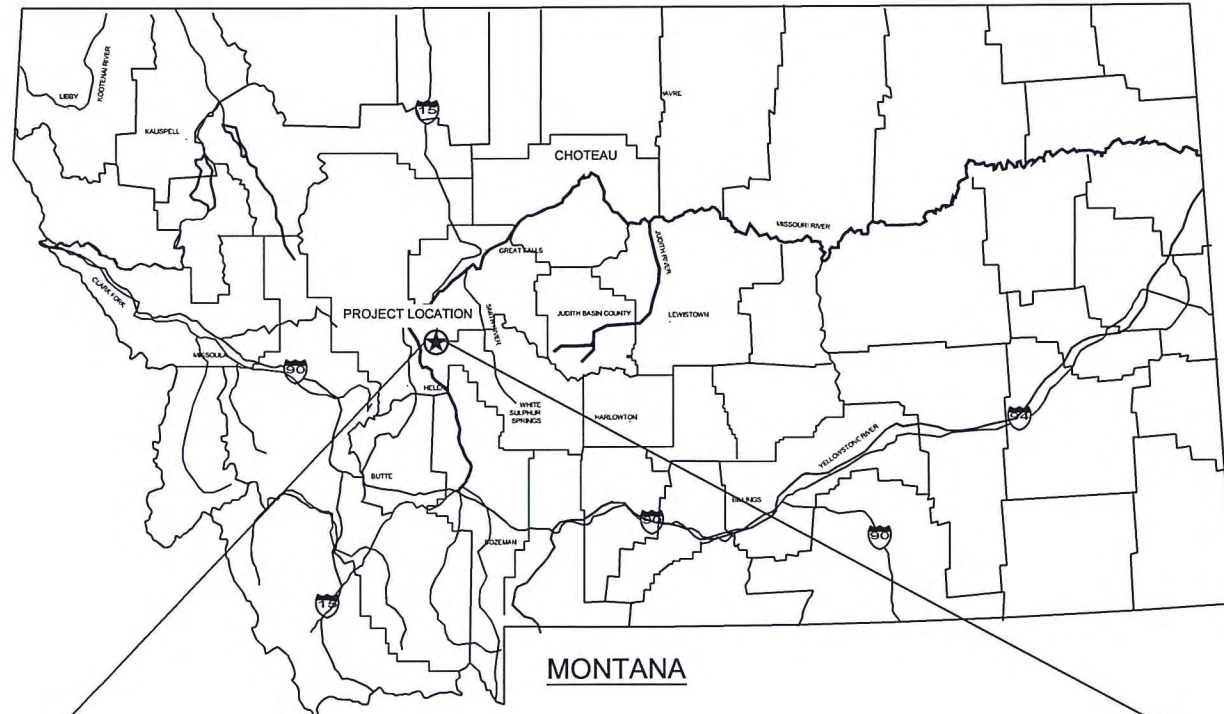
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Offices in Bozeman MT, Denver CO, and Phoenix AZ

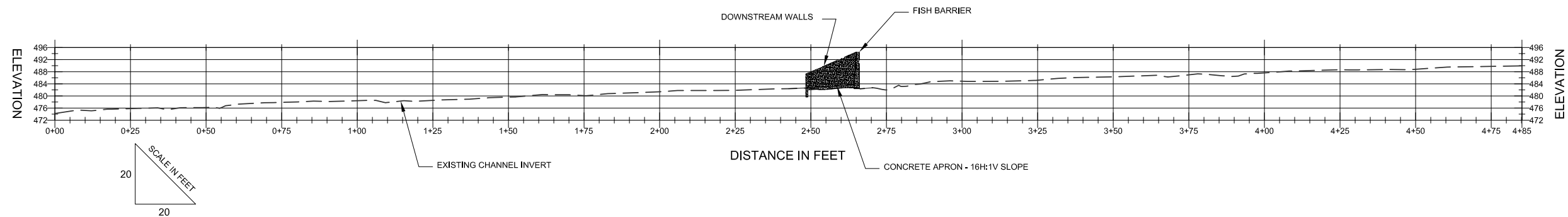
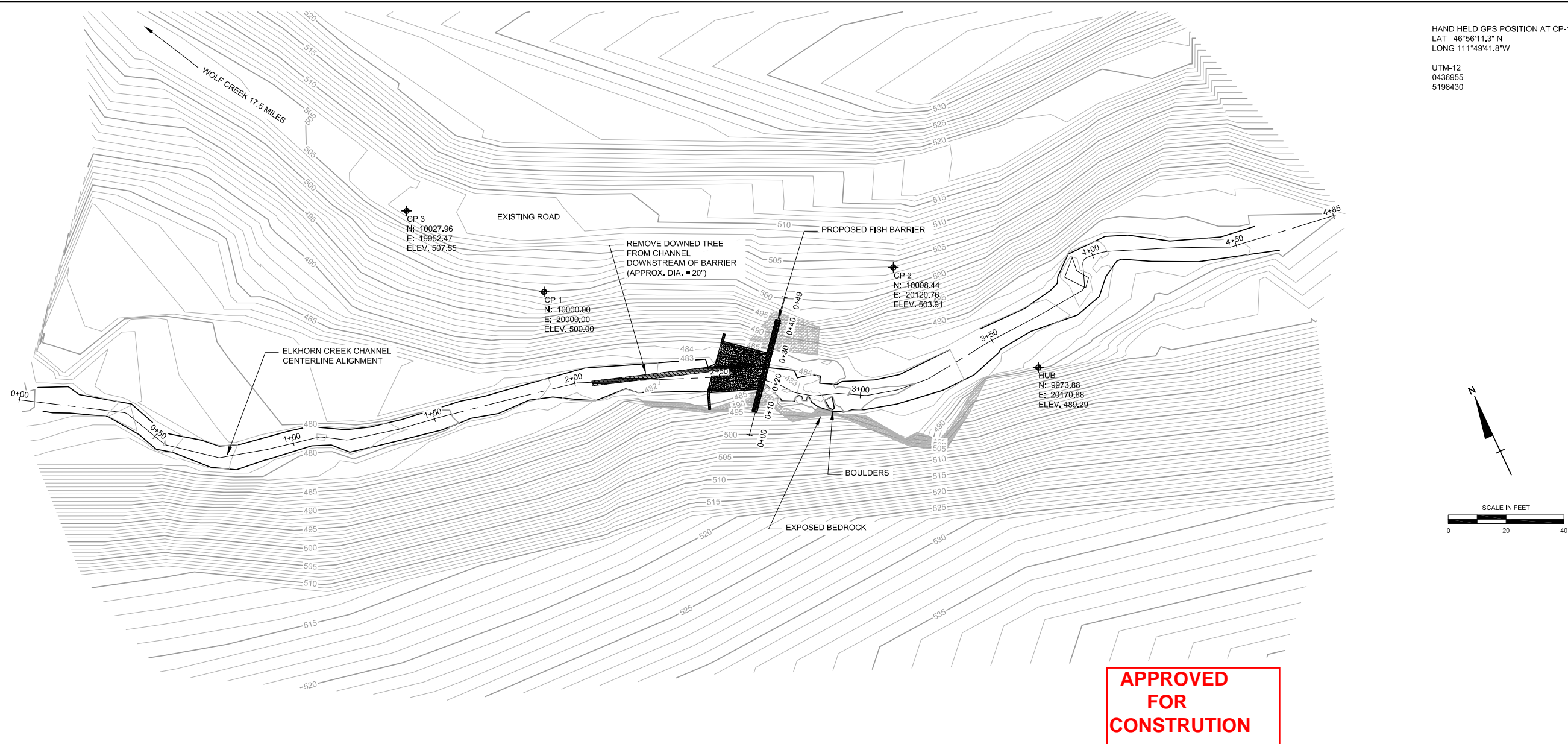
**BEI**  
CIVIL and STRUCTURAL ENGINEERING  
LAND SURVEYING  
PROJECT MANAGEMENT  
BRIDGER ENGINEERS, INC.



PROJECT VICINITY MAP

SHEET

1



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205 Haggerty Lane  
Suite 120  
Bozeman, MT 59715  
Tel: (406) 522-0251  
Fax: (406) 522-0252

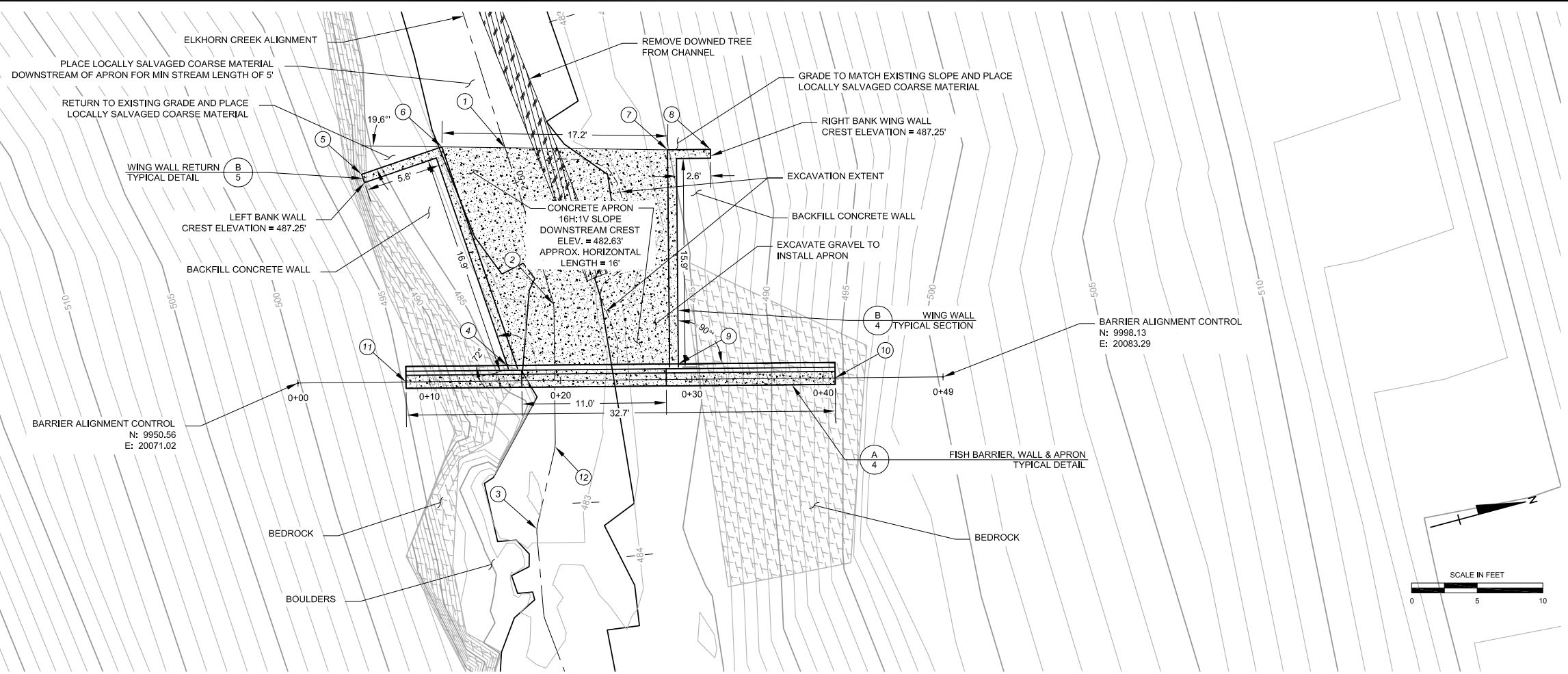
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1819 East Morten Ave.  
Suite 100  
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Tel: (602) 331-3859  
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SITE PLAN AND PROFILE  
ELKHORN CREEK FISH BARRIER

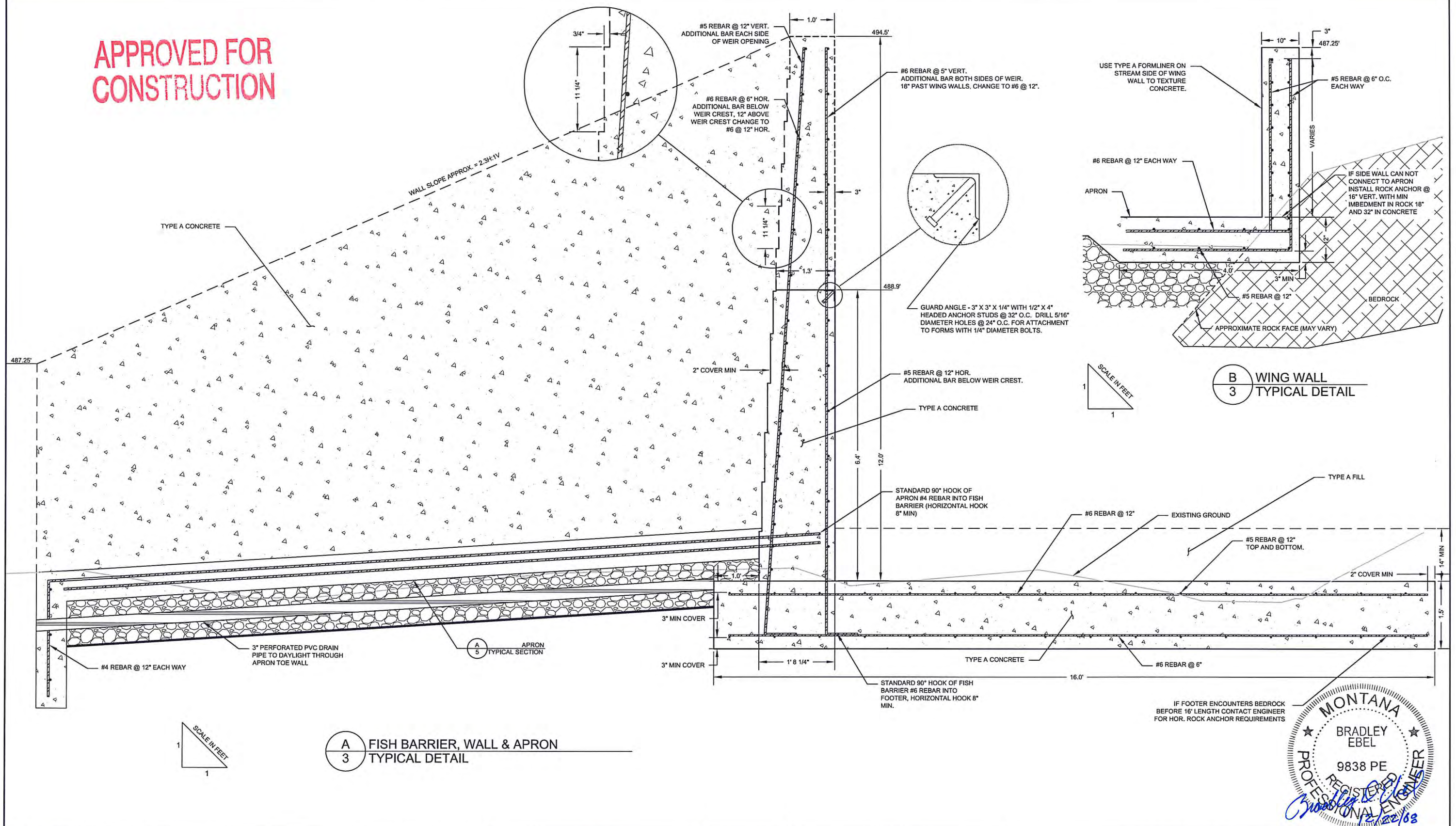
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A 3 FISH BARRIER, WALL & APRON  
TYPICAL DETAIL

B 3 WING WALL  
TYPICAL DETAIL

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TYPICAL DETAILS & SECTIONS  
ELKHORN CREEK FISH BARRIER

PREPARED FOR

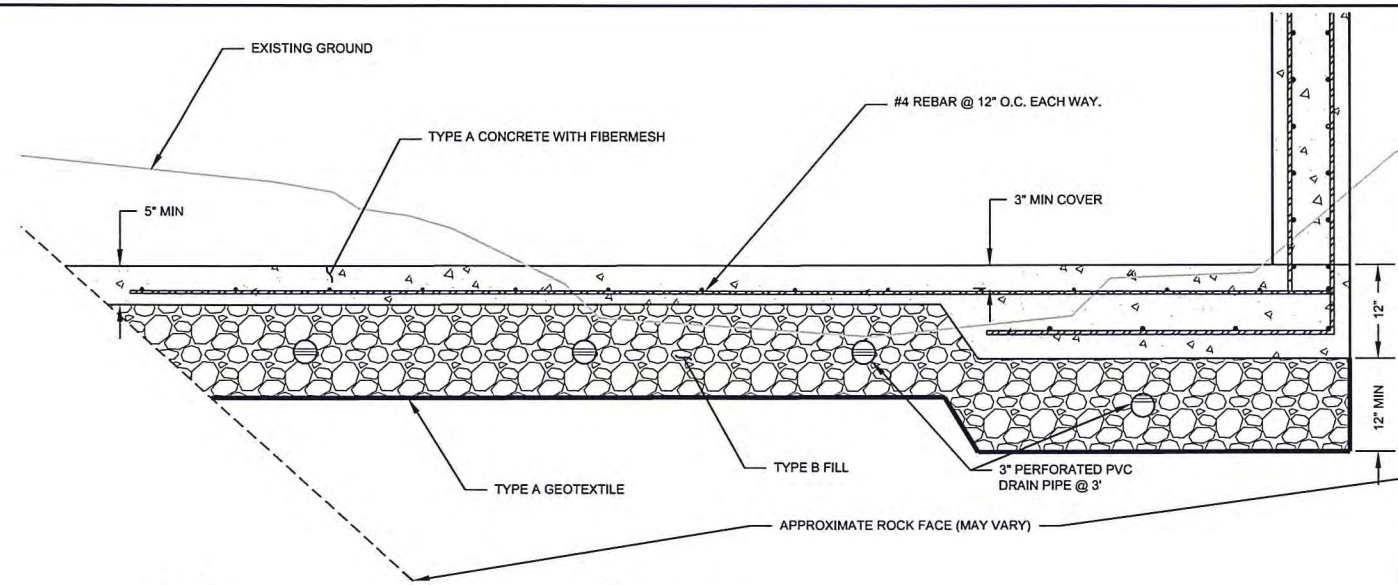
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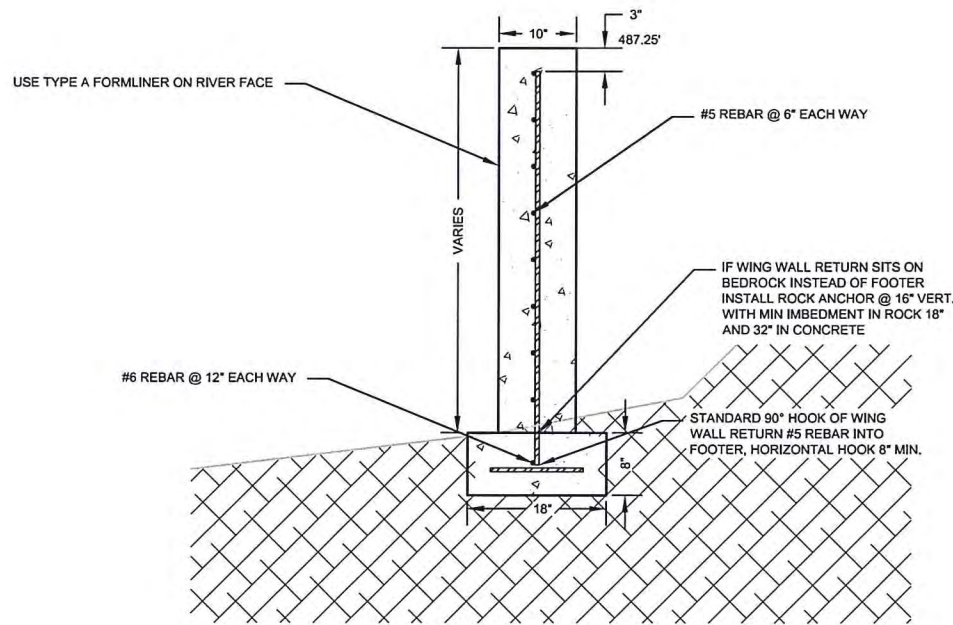
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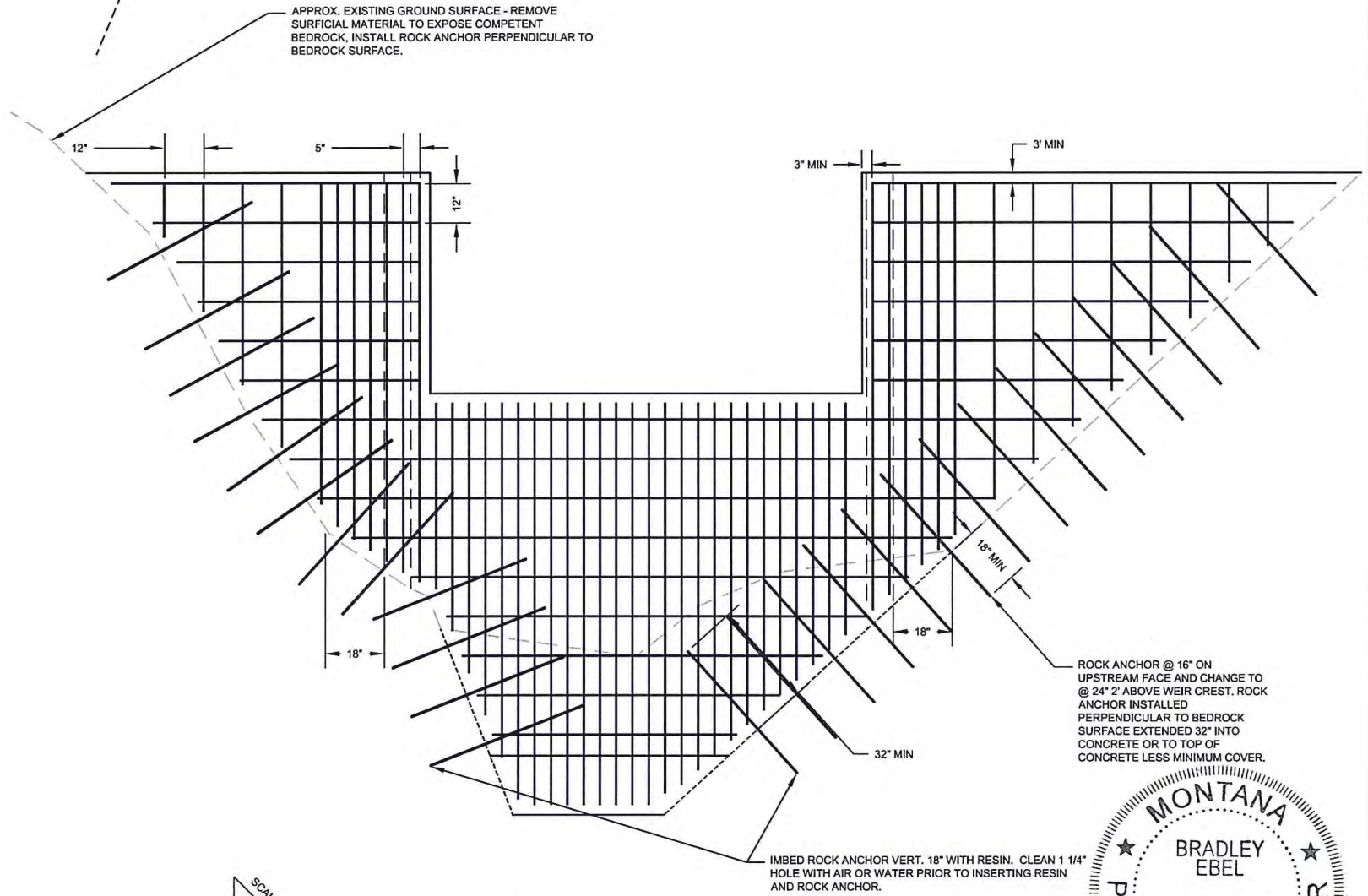
A  
4 APRON  
TYPICAL SECTION

SCALE IN FEET  
1  
1



B  
3 WING WALL RETURN  
TYPICAL DETAIL

SCALE IN FEET  
1  
1



C  
3 FISH BARRIER  
TYPICAL DETAIL-UPSTREAM FACE

SCALE IN FEET  
2  
2

MONTANA  
BRADLEY  
EBEL  
9838 PE  
REGISTERED  
PROFESSIONAL ENGINEER  
12/22/03

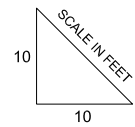
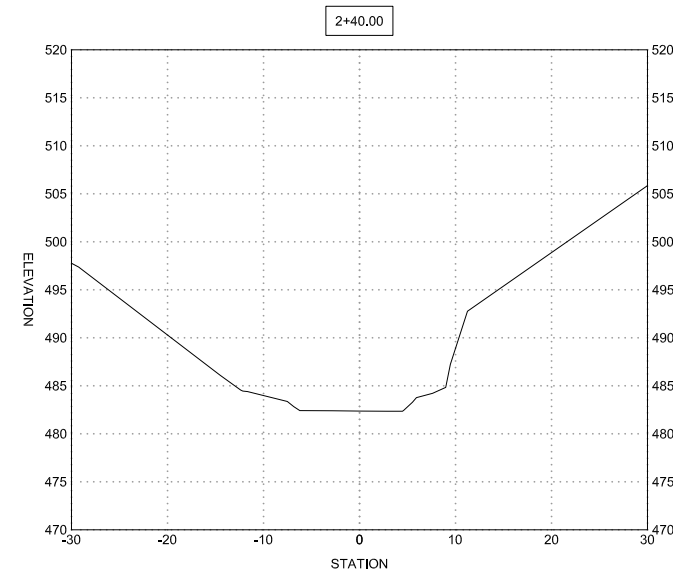
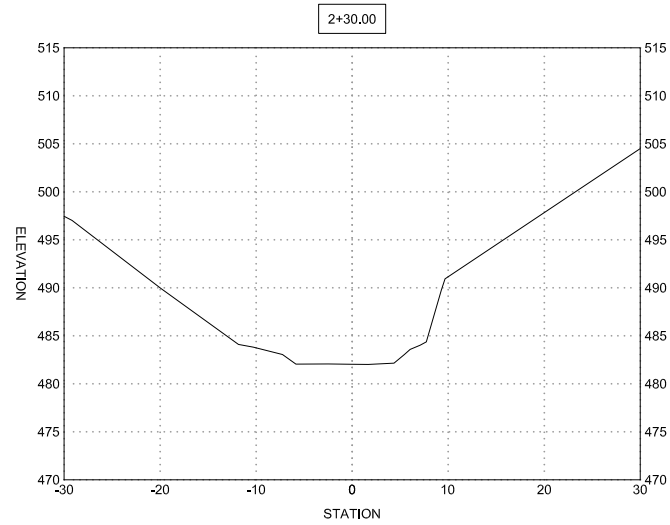
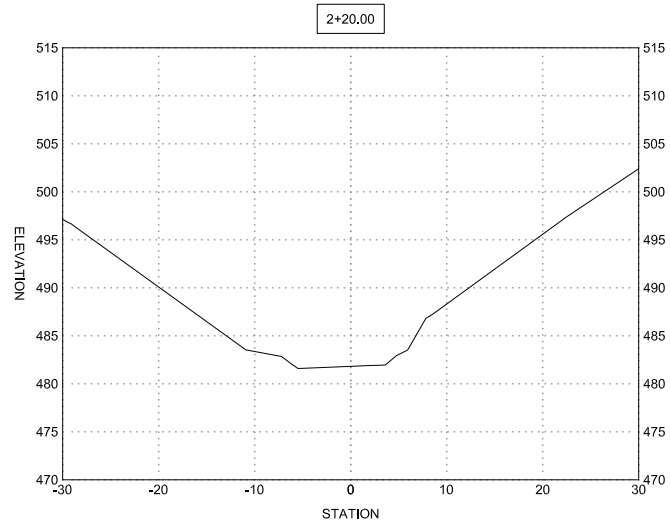
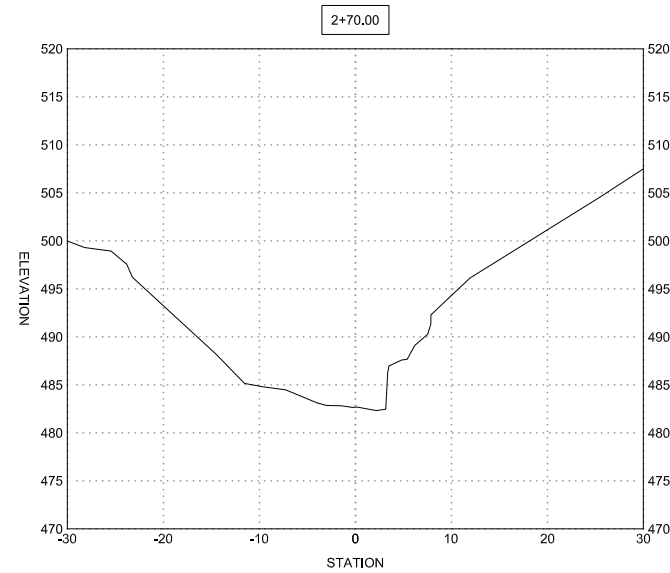
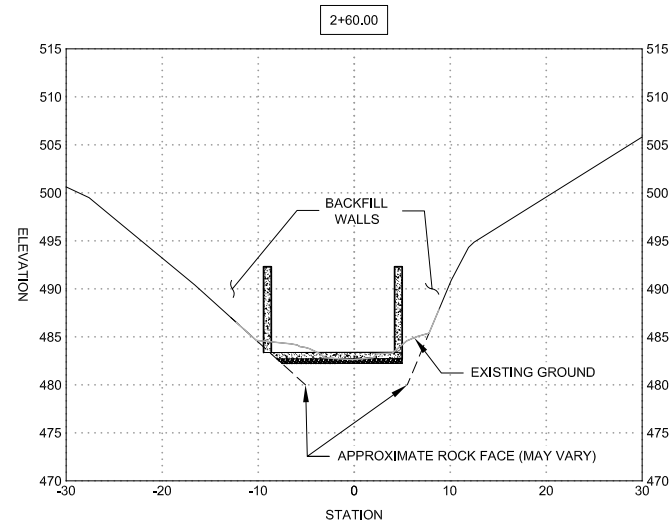
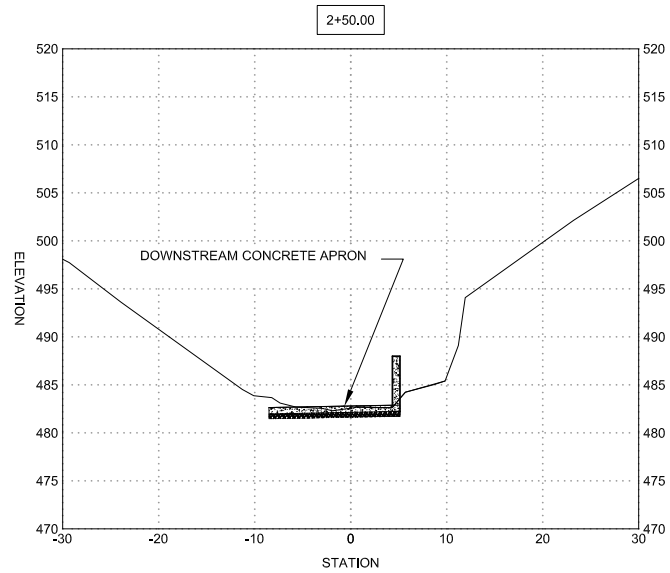
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Bozeman, MT 59715  
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CONCRETE DETAILS  
ELKHORN CREEK FISH BARRIER  
PREPARED FOR  
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NOTES:  
1. CROSS-SECTIONS LOOKING UPSTREAM (INCREASING STATION ON ELKHORN CREEK ALIGNMENT)

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SECTIONS  
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